Apr 77

Library Notes

REPORT FROM THE DECUS LIBRARY

Organizational changes and the illness of one of our Library Controllers, have created a difficult period during the past few months. We regret any inconvenience or delay to users of the DECUS Library, and also express our appreciation for the patience, cooperation, and offers of technical assistance from many DECUS members.

Several of the Library's technical problems have been resolved. We are actively pursuing the use of a PDP-12 computer to provide rapid turnaround for orders of DECtapes and floppy disks. Other technical problems (e.g. RKO5, RSTS-11 Libraries, PDP-15 software, and LINCtape reproduction) are being addressed through Special Interest Groups. Additional temporary help has been hired to help alleviate a backlog of orders, and, in summary - we do see light at the end of the tunnel.

Suggestions For Using The Library

DECUS members who wish to facilitate the processing of their Library orders can often save considerable time by careful preparation of the Library order form. Here are some hints for using the DECUS Program Library:

1. Specify the operating system you are using. (Some popular programs, such as DECUS 11-231 are available for more than one system.)
2. Whenever possible order DECUS supplied media. Orders with user supplied tapes or disks require special handling and frequently cause delays. The European DECUS Chapter strongly requests members to place orders for DECUS supplied media.

3. Never send uncertified or unformatted DECtapes or floppy diskettes. DECUS has no facilities for formatting such media, and difficulties caused by this type of user supplied media delay and increase the cost of processing all Library orders.
4. When possible order programs on media listed as being available in the January 1977 (or later) Library Index. Check with the DECUS Library before ordering a program on media not specified for that particular program.

Popular DECUS Library Programs During February

Some popular PDP-11 programs that have been ordered recently include:

11-241	Runoff for RSX-11
11-260	SRD Sort Directory Listing for RSX-11
11-246	PASCAL-11
11-208	BIOMAC Macros for use with MACRO-11
11-200	DIBOL Translator for COS-350/CTS-300
11-231	ALGOL for RT-11, RSX-11

Popular PDP-8 programs include:

BASIC8-52	APPLE, POSTER, and SIGNS
8-574	FP8 PDP-8 Math Package
8-804	MUSIC Program for the PDP-8
8-779	TC58 Magtape handler - OS/8
8-639	OS/8 Disassembler

New Programs available from the DECUS Library:

11-288   RT-11 TECO (Media/Price: A02, K09, H12, Q24)

RSTS-11-101 DECUS SIG Seminar Programs and Documentation, referenced at the RSTS meeting in Chicago in February. (Media/Price: A02, M16)

We urge members who are interested in working with the DECUS Library to attend one of the Library Workshops at the Spring DECUS Symposia in Boston, May 31st through June 3rd.

The workshops are being held on the following days:

PDP-9/15	--	Tuesday at 4:15 PM
PDP-8	--	Wednesday at 3:15 PM
PDP-11/RSTS		Wednesday at 3:45 PM
PDP-12	--	Thursday evening at

7:00 PM there will be a Library Working Session.

Decus Program Library

Director Appointed

Charles (Chuck) Conley has been appointed Director of the DECUS Library. Chuck Conley has been with DIGITAL since 1967 and leaves the position of Product Services Manager in the Corporate Operation Group in Maynard. Previously, he held the positions of Programmer, Software Development Supervisor, Software Marketing Specialist for the OEM Product Line, and Software Support Supervisor in HOSS. In his position of Software Development Supervisor, Chuck had responsibility for early development of the OS/8 Operating System for the PDP-8. Chuck has been a contributor to the DECUS Library on several occasions and has been a frequent participant at the DECUS Symposia. Chuck holds a Bachelor of Science degree in Computer Science from the University of Missouri.

The sharing of programs and documentation has always been an important activity of DECUS. The computer industry is increasing its emphasis on software and documentation. Chuck's background and experience with both DIGITAL and DECUS are appropriate to the task of building a quality Library for the Society.

SIG News

MUSIG, the MUMPS Users Special Interest
Group, has been formed inside DECUS,
with Chairman Mr. James Peebles who
may be contacted c/o DECUS.

This SIG organizes sessions at the DECUS
Symposiums. It has a newsletter available
from DECUS. For information on SIG
activities, please contact Mr. Peebles.

Proceedings Available

The Proceedings of the 1976 Australia
Symposium are now available from the
Maynard and Australia DECUS offices.
Single copy price is $10.00 (U.S.). These
Proceedings complete Volume 2 of the
*Proceedings of the Digital Equipment
Computer Users Society*. The series
documents the Europe 1975, Canada 1976,
Australia 1976, and the United States
Fall 1975 and Spring 1976 symposiums.

The cumulative technical keyword index
was distributed to all subscribers along
with the last issue of the series. The index
references the published papers by tech-
nical keywords provided by the author.
The complete Volume 2 and the index
are available for $40.00 (U.S.) through
your local DECUS office.

The Proceedings of the 1976 DECUS
Europe Symposium, held in Munich,
Germany are also available. This Proceedings
represents the first issue of Volume 3,
available on subscription for $60.00 (U.S.)
through your local DECUS office. The
Proceedings of the symposium held in
Las Vegas, Nevada, in December 1976,
will be available in early April.

Single copies of Volume 3 Proceedings
may be ordered for $15.00 (U.S.) through
your local DECUS office.

Bulletin Board

Does any PDP-8E/L/I user have a program
or package for designing a printed circuit
board layout? I would especially appre-
ciate a BASIC or FOCAL version, but any
basis would be very useful. Memory
should be no significant problem with the
availability of extended core, disk, DEC-
pack, and DECtape.
Any information for efficient PC layouts
using computers would prove helpful.

> Robert G. Bourne
> 308 Smith Hall
> Ripon College
> Ripon, WI 54971

Would appreciate any information on
software for production planning and/or
scheduling in the apparel industry.

> Mack Nichols
> P.O. Box 636
> Shelbyville, TN 37160

We are interested in any application
software written for PDP-11/RT11 con-
figurations. Areas of special interest
include financial, inventory, terminal
emulation, and communication.
Please send us a brief description and
details on any costs involved.

> W. Ronald Davies
> RDA, Inc.
> 5012 Herzel Place
> Beltsville, MD 20705

We are currently evaluating the need for
a PDP-10 Data Base Management System.
We would appreciate information on the
availability of systems similar to DEC's
DBMS-10, but capable of handling variable
length data fields.

> Henry H. Horton
> U.S. Energy Research & Dev.
> Administration
> Technical Information Ctr.
> P.O. Box 62
> Oak Ridge, TN 37830

I wish to purchase any PDP-8 computer
with or without teletype.

> Rocco Barbiere
> 2154 Royce Street
> Brooklyn, NY 11234

I am running RTS-8 on a lab PDP-8/E. The clock handler for the DK8-EP does not contain any method of handling the Schmitt triggers. I would like any information from anyone who has written a clock handler that does take into account the Schmitt triggers. The clock will be used to construct histograms from data acquired during experiments with single neuron cells.

Bruce A. Ernst
SIU School of Medicine
611 North Klein
Springfield, IL 62702

WANTED:
Eleven DP11-DA's or DU Synchronous Communications Interfaces for a PDP-11. If you can supply all or part with immediate delivery, contact:

Jack Johnson
Box AA
San Mateo, CA 94402

Programs Available

COMPUTER GRAPHICS AND LUNG FUNCTION TESTS

Submitted by:

Arend Bouhuys and Michael Littner
Yale University Lung Research Center
New Haven, CT

COMPUTER: PDP-8/E

We describe applications of computer graphics in two test systems for clinical research on lung disease. One system, installed in a mobile laboratory, uses graphical display of questionnaire data and maximum expiratory flow-volume curves to record information on respiratory symptoms, environmental exposures, and lung function in large-scale epidemiological studies. The other system uses graphical display to facilitate and standardize Fowler's analysis of nitrogen clearance curves — a method of considerable clinical potential — reducing the time required for data processing from hours to minutes and improving its accuracy and objectivity.

Material is available from the author for reproduction costs only.

ON-LINE COMPUTER SYSTEMS FOR RECORDING OF RESPIRATORY QUESTIONNAIRES AND MEFV CURVES

Submitted by:

A. Bouhuys, C.A. Mitchell and
R.W. Tuttle
Yale University Lung Research Center
New Haven, CT

COMPUTER: PDP-8/E

We have designed a system that records, processes, and synthesizes lung function data, personal data, and data on respiratory symptoms and environmental exposures. The hardware consists of two test stations for data acquisition, a dedicated central processing unit, and peripherals for both hard-copy and computer-compatible data output. The software includes (1) a monitor program, with subroutine library, for time-sharing and service routines; (2) user programs for questionnaire and lung function data acquisition; and (3) data storage fields. The system has been used to study about 8,000 subjects in surveys of four communities, at a rate of up to 120 persons per day.

Material is available from the author for reproduction costs only.

RECORD AND DISPLAY FREQUENCY

Submitted by:

A.B. Rostron
Dept. of Psychology
University of Hull
Hull HU6 7RX, England

COMPUTER: PDP-8

In conventional methods of obtaining an analog value of frequency using off-the-shelf analog modules, a compromise must be reached in the design, such that output ripple is low while at the same time a reasonable settling time is obtained. The present software solution offers an alternative approach to the problem by timing input generated interrupts with a DK8-EP real-time clock. The period values obtained are either stored or output via a D/A converter to an oscilloscope display.

The frequency recording routine is used in conjunction with a display section, enabling a stored sequence of frequency values to be displayed on a VT8E video terminal (if required cumulative displays can be built up). Routines are also available for performing I/O transfers to and from data buffer from TD8E DECtape. The control section of the system has some half dozen basic commands and on the completion of each command the control section is re-entered so that further commands can be given as required.

In principle, any transducer can be sampled but in the author's application the fundamental frequency of the human voice was recorded via an accelerometer attached to the throat, as described by Stevens, Kalikow and Willemain (1974), so that intonation patterns of speech could be displayed visually. It is hoped that the system will have some practical application as a training aid for the deaf and some training procedures for this purpose are being developed.

Minimum hardware is an 8k PDP-8 with teletype, DK8-EP clock and VT8E terminal. TD8E DECtape is required for the backing store routines and the system runs under OS/8. A copy of the program together with user instructions can be obtained from the author at the above address.

REFERENCE

Stevens, K.N. Kalikow, D.N. and T.R. Willemain. The Use of a Miniature Accelerometer for Detecting Glottal Waveforms and Nasality.
Bolt, Beranek and Newman Research Report No. 2907
Sept. 1974

DECUS Nordic

NEW DECUS NORDIC SECRETARY

Suzanne Thulin has replaced Helen Andrean as secretary to the DECUS NORDIC NUG. Her address is:

Digital Equipment AB
Englundsvaagen 7
S-17141
Solna, Sweden

Calendar 1977

APRIL

1977 U.K. CONFERENCE
April 12-15, Van Mildert College
Durham.
Contact DECUS, Fountain House,
Reading RG1, 7QN, England

1977 DEC-10/20 SPRING SYMPOSIUM
April 19-22, Hyatt Regency Hotel,
Cambridge, Massachusetts.
Contact DECUS, Maynard, Massachusetts

MAY

**SYMPOSIUM ON MINICOMPUTERS &
LARGE SCALE COMPUTATIONS**
Sponsored by: ACS Division of Computers
in Chemistry
May 29 - June 2, Montreal, Canada.
Contact: Professor Peter Lykos
Illinois Inst. of Technology
Chicago, IL 60616

1977 DECUS U.S. SPRING SYMPOSIUM
(MINI/MIDI ONLY)
May 31 - June 3, Sheraton Hotel,
Boston, Massachusetts.
Contact DECUS, Maynard, Massachusetts

JUNE

**NATL. CONFERENCE ON COMPUTER
SYSTEM PRODUCTIVITY**
Sponsored by: Society for Management
Information Systems
June 27-29, Washington, DC.
Contact: Conference Manager
The Inst. for Professional
Education
Suite 601, 1901 No. Fort
Myer Drive
Arlington, VA 22209

AUGUST

1977 DECUS AUSTRALIA SYMPOSIUM
August 29 - September 2, James Cook
University, Townsville, Queensland.
Contact DECUS, P.O. Box 491,
Crows Nest, N.S.W., 2065, Australia

SEPTEMBER

1977 DECUS EUROPE SYMPOSIUM
September 6-8, Heathrow Hotel,
London, England.
Contact DECUS, P.O. Box 340,
1211 Geneva 26, Switzerland

OCTOBER

INFO/EXPO 1977
International Data Processing Conference
and Business Exposition
Sponsored by: DPMA - Data Processing
Management Association
October 9-12, Washington, DC Hilton.
Contact: Lila Suurmeyer, Conf. Coord.
DPMA Internatl. Headquarters
505 Busse Highway
Park Ridge, IL 60068

NOVEMBER

1977 DECUS U.S. FALL SYMPOSIUM
(MINI/MIDI AND DECSYSTEM-10/20)
November 28 - December 1,
Town and Country Hotel,
San Diego, California.
Contact DECUS, Maynard, Massachusetts

decuscope

Maynard, Massachusetts 01754
ADDRESS CORRECTION REQUESTED

ID50347
THEODOR H NELSON

BOX 3
SCHOOLEYS MOUNTAIN NJ
07870